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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,749	11/19/2003	Jung Pill Kim	2003P52591US	6180
46798	7590	10/24/2005	EXAMINER	
PATTERSON & SHERIDAN, LLP 3040 POST OAK BLVD., SUITE 1500 HOUSTON, TX 77056			PHAN, TRONG Q	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 10/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/716,749	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> TRONG PHAN	<b>Art Unit</b> 2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,22 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-21,23 and 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/16/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 3, 5-21, 23 and 25-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not understood how the device temperature may be provided as bits in a mode register containing externally supplied temperature information as recited in lines 3-5 of paragraph [0023] since the generation of the external supplied temperature information is not described.

It is not understood how the temperature control signal TD[0:N] may be generated based on externally supplied temperature information stored as bits in a mode register or by an internal temperature sensor (not shown) as recited in lines 4-6 of paragraph [0028] since the generation of the external supplied temperature information is not described and the internal temperature sensor is not shown in the drawings of the present invention.

It is not understood what type of mode register 320 really is and how it can store

two bits of temperature information T[0:1] as recited in lines 3-4 of paragraph [0030] since the external temperature sensor incorporated with mode register 320 is not shown in the drawings of the present invention.

It is not understood what the b'1000' (line 2 of paragraph [0036]), b'0100' (line 9 of paragraph [0036]), b'0010' and b'0001' (line 13 of paragraph [0036]) really are.

The feature "wherein obtaining temperature information comprises reading one or more bits in a mode register as recited in claim 1, the features as recited in claims 3, 16-17 and 23 are not described in the specification.

It is not understood what type of mode register for supplying temperature information indicative of a temperature of the memory device as recited in claim 21 really is since Figs. 3-4 of the present invention does not show any external/internal temperature sensor incorporated with mode register 320.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5-21, 23 and 25-30 are, insofar as understood, rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al., 6,809,978.

Alexander et al., 6,809,978, discloses in Fig. 8 a voltage control system 301' for generating a plurality of internal voltages for memory device in Fig. 6 comprising: temperature sensor 350;

internal voltage generator 368;  
control system CTRL 366 which can be obviously the control logic circuit including  
mode register in Fig. 6;  
as shown in Fig. 6, memory banks and peripheral circuits.

Since the subject matter of the present invention as recited in claims 1, 3, 5-21, 23 and 25-30 are not understood as rejected under 35 USC 112, first paragraph, as set forth above, therefore, all the remaining features as recited in claims 1, 3, 5-21, 23 and 25-30 are also rendered obvious under 35 USC 103(a) over Alexander et al., 6,809,978.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 3, 5-21 and 23 are, insofar as understood, provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/716,762. Although the conflicting claims are not identical, they are not patentably distinct from each other because the output voltage as recited in 1, 3, 5-21 and 23 of the present invention

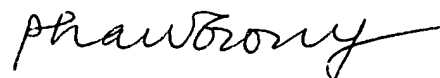
would be obviously read on the bias voltage as recited in claims 1-28 of the copending Application No. 10/716,762.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRONG PHAN whose telephone number is (571) 272-1794. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HOAI HO can be reached on (571)272-1777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**TRONG PHAN  
PRIMARY EXAMINER**



# REPLACEMENT SHEET

ATTY DKT. NO.: INFN/SZ0017  
 J.S. SERIAL NO.: 10/716,749  
 FILED: NOVEMBER 19, 2003  
 TITLE: INTERNAL VOLTAGE GENERATOR WITH TEMPERATURE CONTROL  
 INVENTOR(S): JUNG PILL KIM ET AL.

CONF. NO.: 6180

SHEET 2 OF 8

Approved  
 TP  
 10/19/05

2/8

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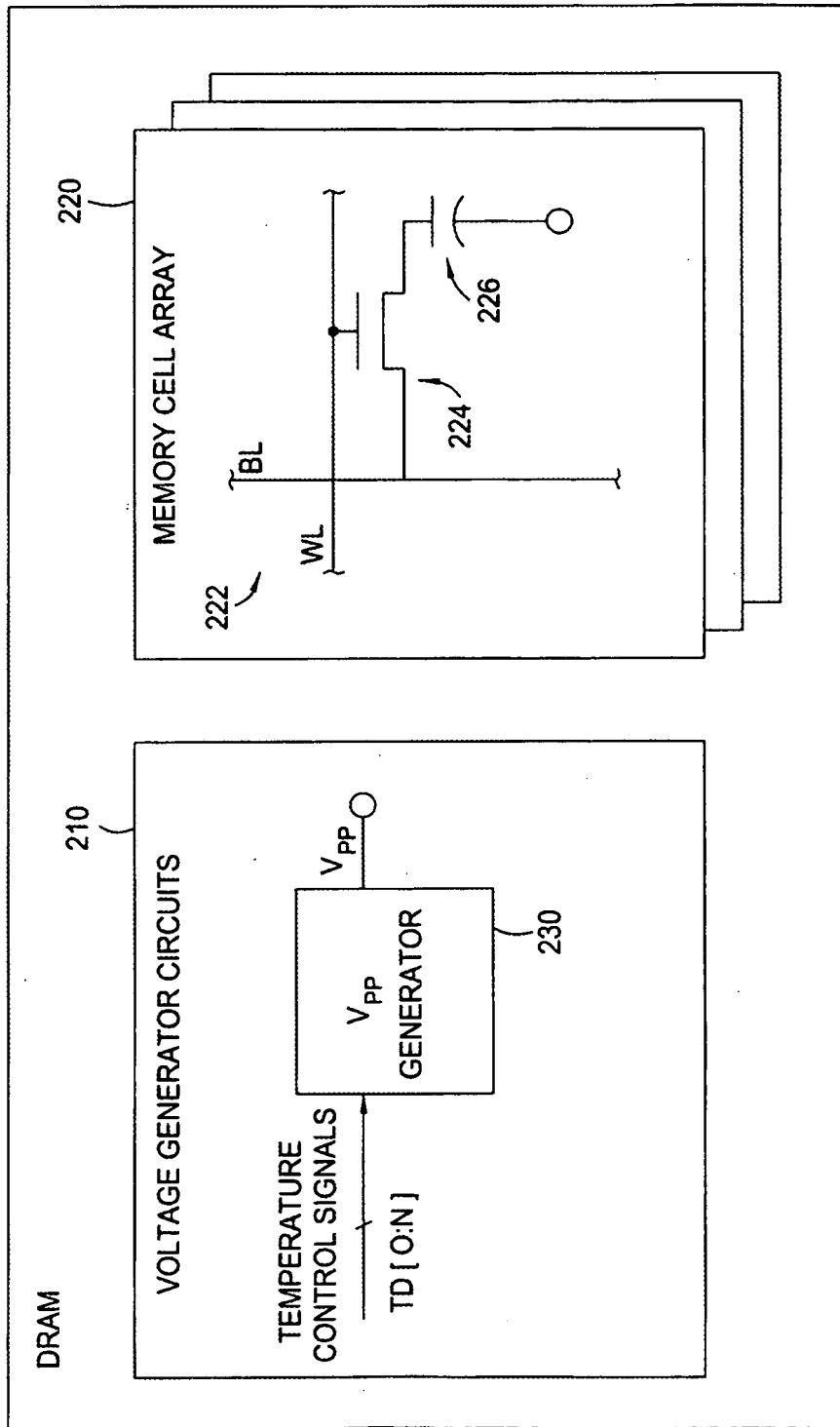
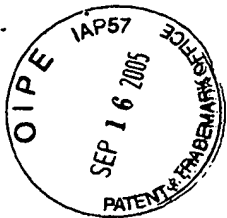


FIG. 2



# REPLACEMENT SHEET

ATTY DKT. NO.: INFN/SZ0017  
 J.S. SERIAL NO.: 10/716,749  
 FILED: NOVEMBER 19, 2003  
 TITLE: INTERNAL VOLTAGE GENERATOR WITH TEMPERATURE CONTROL  
 INVENTOR(S): JUNG PILL KIM ET AL.  
 CONF. NO.: 6180  
 SHEET 7 OF 8

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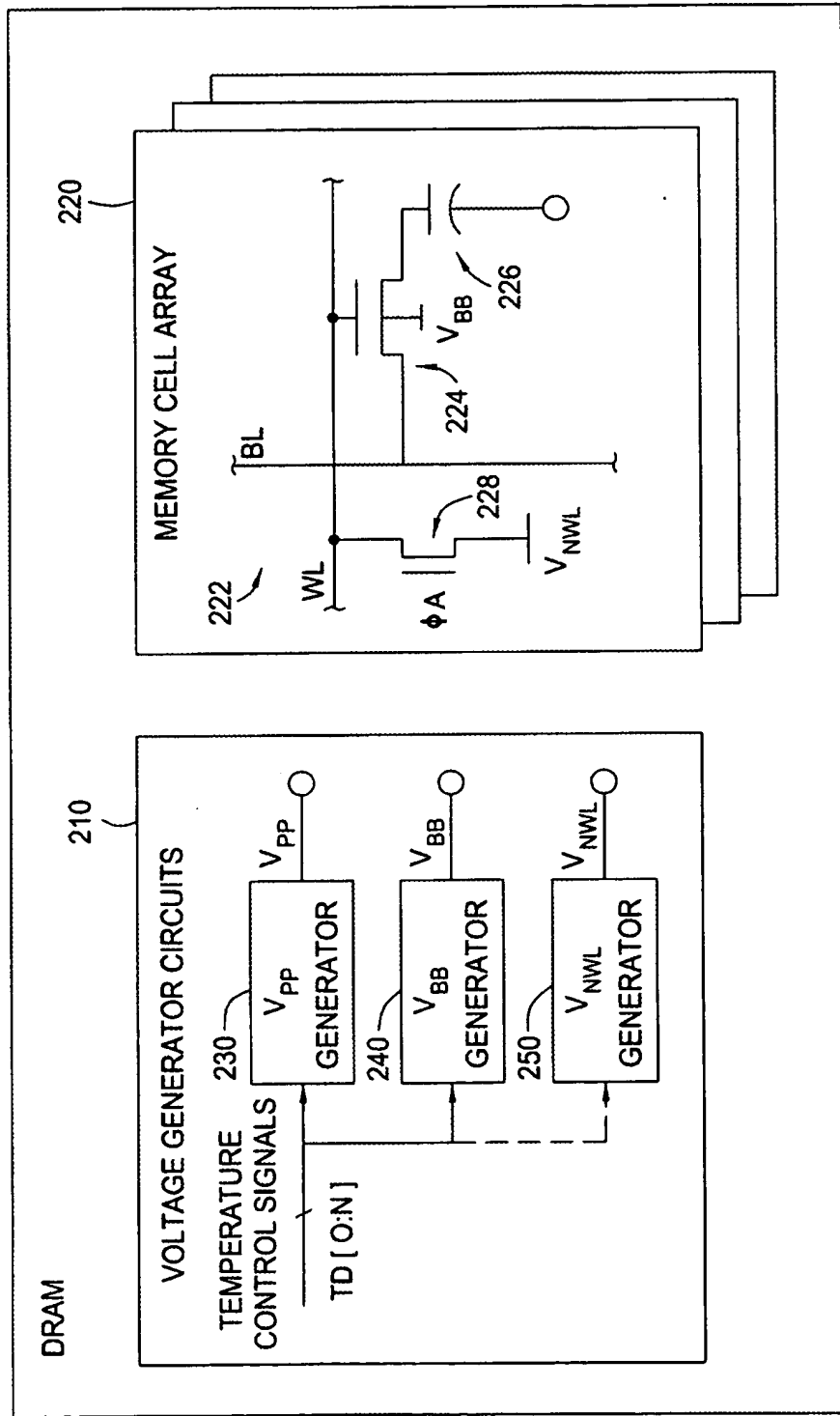


FIG. 7